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ABSTRACT

This report on the nature and role of institutional research addresses itself to the following questicns: (1) what is institutional research? (2) hcw "pure" can institutional research be? (3) what can institutional research do for the institution? (the report lists such functions as: preparing operating, analytic and summary reports, conducting analytic cr modeling studies, designing management information systems, doing special studies and studies in support of educ tional development, dcing related staff work, and responding to questionnaires); (4) should institutional research be administratively or educaticnally oriented? (5) how should institutional research relate to long-range planning? (6) how should irstitutional research be organized? and (7) what are the requirements for effective institutional research? (AF)

THE NATURE AND ROLE OF INSTITUTIONAL RESEARCH ... MEMO TO A COLLEGE OR UNIVERSITY

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A STATEMENT PREPARED FOR
THE ASSOCIATION FOR INSTITUTIONAL RESEARCH

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Preface

As noted by the authors of this memorandum, institutional research has a long history as a function in higher education but a very short history as an organized activity within individual institutions. Since its inception in the spring of 1965, the Association for Institutional Research has made efforts through its formal activities and through its numerous members to describe, define and explain the roles and functions of institutional research to assist newly appointment officers and newly formed offices responsible for this institutional activity. Such appointments and formations continue and inquiries received from college and university administrators and faculty committees have established a clear need for a prepared statement on the nature and role of institutional research. The authors of this memorandum have addressed themselves mainly to this audience, however, I am confident that others will find it of interest and use.

Since the authors are full-time institutional researchers, there is the possibility of bias in their views. They have, however, attempted to avoid taking positions that might be considered to represent narrow self-interest by a professional group seeking self-enhancement and have attempted to discuss the topic in the context of the institution as a whole. On balance the benefits of intimate experience probably outweigh the merits of detachment that have been brought to discussions of institutional research by some less involved authorities.

While precise agreement on all points discussed in this publication might be difficult to obtain from practitioners, nevertheless members of the Executive Committee of the Association for Institutional Research have reviewed it with care and have expressed endorsement in general of the thrust of the paper.

Sidney Suslow, President
Association for Institutional Research

Berkeley, California

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[1] Memo to a Newcomer to the Field of Institutional Research, Joe L. Saupe. The Association for Institutional Research, July, 1967. 24 pp.

[2] Memo to a Newcomer to the Field of Institutional Research, Revised Edition, James K. Morishima and Joe L. Saupe. The Association for Institutional Research, forthcoming.

THE NATURE AND ROLE OF

INSTITUTIONAL RESEARCH - - - MEMO TO

A COLLEGE OR UNIVERSITY

Introduction

Colleges and universities do not now and probably never have been operated without quantitative data and other types of "hard" information; in fact, in 1959 Professor W. H. Cowley addressed himself to the topic "Two and a Half Centuries of Institutional Research."[2] Furthermore, published histories of individual colleges and universities contain references to surveys and other bona fide institutional research activities during the nineteenth century, and the United States Office of Education began collecting statistics on higher education in 1869. The function of institutional research is not new.

The "institutionalization" of institutional research has occurred more recently. Organizational units for institutional research were established in several major universities around 1920, but the term "institutional research" did not make a solid entry into the vocabulary of higher education until the late 1950's.[3] During the past ten or fifteen years the number of colleges and universities adding titles and organizational units for the institutional research function has increased substantially.

It is only possible to speculate on the reasons for this development. It is easy and probably largely correct to say that institutional growth in size and complexity and all of the familiar ramifications of this growth have produced a need for more and better information for decision-making and planning. Also, the growth of the higher education industry has brought an increased need for public accountability by individual institutions and formalized institutional research has, in many cases, been seen as an answer to this need. In addition, as the values of science and research, in general, and scientific management, in particular, have increasingly become

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[1]This statement draws extensively on a talk given at a Workshop on Institutional Research, sponsored by the West Virginia Commission on Higher Education, Joe L. Saupe, "Some General Remarks on the Nature, Scope and Function of Institutional Research," Michigan State University, mimeographed, August, 1968.

[2]W. H. Cowley, "Two and a Half Centuries of Institutional Research," in College Self Study: Lectures on Institutional Research, Richard G. Axt and Hall T. Sprague (Ed.). Boulder, Colo: The Western Interstate Commission for Higher Education, 1960. pp. 1-16.

[3]It has been argued that the term institutional research is an inaccurate description of the work, much of which involves the assembling of figures, that bears this designation. Without entering this argument, the traditional term is used in this statement.

embedded in our society, the infusion of these values into the management and planning of higher education institutions has been a natural development.

Whatever the reasons, many colleges and universities have in the past few years formalized institutional research activities; others are contemplating actions to do so now; still others will certainly do so in the next few years. This memo is written as a resource for the individuals who will decide whether and how institutional research should be introduced. It contains discussions of questions that are typically posed as a college or university considers whether or not and how to formalize the institutional research function.

What is Institutional Research?

Though the more relevant question is "What can institutional research do for our institution?" a definition for institutional research is basic to this memo and the question deserves a careful answer.

One definition reads:

> Institutional research involves the collection of data or the making of studies useful or necessary in (a) understanding and interpreting the institution; (b) making intelligent decisions about current operations or plans for the future; (c) improving the efficiency and effectiveness of the institution.[4]

This definition tends to encompass the widely separate views, both frequently cited, of John Dale Russell and Nevitt Sanford. The former stresses the need for an administratively oriented office to make "studies needed for the making of important decisions about policy and procedures,"[5] while the latter has called for studies by a research organization free from administrative needs and devoted to "theoretically-oriented, long-term studies of students and intensive, probably also long-term studies of the inner workings of educational institutions."[6] The implications of the contrasting views of Dr. Russell, a dean of applied institutional research, and Dr. Sanford, a leading scholar in higher education, are extremely important to the operation of an office of institutional research.

Rourke and Brooks suggest that

> . . . institutional research is a variegated form of organizational self-study designed to help colleges and universities gather an

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[4]Paul L. Dressel, "The Nature of Institutional Research," Michigan State University, mimeographed, 1966.

[5]John Dale Russell, "Dollars and Cents: Some Hard Facts," Higher Education: Some Newer Developments, Samuel Baskin (Ed.). New York: McGraw-Hill, 1965. pp. 284-303.

[6]Nevitt Sanford (Ed.), The American College. New York: John Wiley, 1962. pp. 1027-28.

expanding range of information about their own internal operations and the effectiveness with which they are using their resources.[7]

These views span the range of definitions in the literature and provide background for our own definition which is that institutional research consists of data collection, analyses, reporting, and related staff work designed to facilitate operations and decision-making within institutions of higher education. A few of the terms in this definition merit brief discussion.

Regarding data collection, there are many institutional research efforts for which fresh data must be collected. Questionnaires, interviews, tests, and other techniques are used. On the other hand, financial, student enrollment, and other types of data are routinely collected in various offices of the institution as part of the operating process and need not be collected anew for institutional research. Often a function of institutional research is to organize exisiting raw data into forms especially useful for analysis and interpretation.

Analysis is a central function of institutional research. Data showing enrollment, staff counts, and financial conditions often exist in unanalyzed compilations. The processing of such data into tables, charts, or graphs is a simple form of analysis which may give the data new meaning. A more fundamental form of analysis involves statistical treatment, the relating of different types of data, and the specification of implications.

Reports usually result from institutional research. Because institutional research is a staff function, the reports present the facts and, hopefully, are used in decision-making, a process controlled not only by facts but also by other essential considerations. These reports, where prepared in the tradition of thorough staff studies, should report the data and data analysis and include interpretations, conclusions, and perhaps one or alternative recommendation.

Increasingly, staff work other than data tabulation, studies, and reports is being associated with institutional research. Many institutional researchers find themselves consulting with faculty and other committees of the institution, developing procedures for institutional operation and management, and writing position papers on issues of concern. Some participate in budgeting, legislative hearings, and board meetings, but one substantial view is that the researcher should not be called into political situations. To the degree that the institutional researcher is considered an expert on higher education, it is only natural for him to be called upon for staff work other than research. We believe he should be such an expert and, with proper consideration of priorities on his time, should assist his college or university in any way he can.

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[7]Francis E. Rourke and Glenn E. Brooks, The Managerial Revolution in Higher Education. Baltimore: John Hopkins Press, 1966. p. 44.

While institutional research is a resource for decision-making in many areas, it is not necessary to expect that all institutional research will lead immediately to decisions or even be directly related to current problems. At one extreme, a decision on the immediate issue of whether or not to increase student fees and by how much may be based, in part, on data analysis or a specific study. At the other extreme, there may be general institutional concerns and research on such concerns may not be expected to have immediate impact. Research, for example, directed at understanding the institution, the campus climate thereof, the background characteristics of students, the nature of student programs as revealed in transcripts, and other dimensions, might fall into a category without immediate usage but with important long-run implications.

How "Pure" Can Institutional Research Be?

Much institutional research is focused on immediate problems and issues of the institution. As a result the field of institutional research has been criticized on the basis that it has produced little of lasting significance.[8] The critics seem to confuse institutional research, as we view it, with the more basic research on higher education carried out in the centers for the study of higher education and by scholars in higher education and related subject fields. Certainly the more fundamental research is essential and practicing institutional researchers would be proud to have the general researchers included with them in a broader category of those committed to institutional research.[9] But institutional research is specific and applied and the other is general and theoretical, institutional research should not be expected to produce knowledge of pervasive and lasting significance, though on occasion it may.

Institutional research and the more basic research on higher education should, however, mutually benefit from close association. Since the problems of individual institutions often parallel the basic problems and fundamental issues of higher education, there should be an interaction between institutional research and general research on higher education. The latter should be expected to produce theories, methods, and results useful to the former, and the former may produce findings and procedures with implications for the latter. Some institutional researchers may even be expected to devote a portion of their energies to general research on higher education.

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[8]See Lewis B. Mayhew, "Imperatives for Institutional Research," Research on Academic Input. (Proceedings of the Sixth Annual Forum of the Association for Institutional Research), Clarence H. Bagley (Ed.). The Association for Institutional Research, 1966. pp. 1-9; Frederick de W. Bolman, "University Reform and Institutional Research," The Challenge and Response of Institutional Research (Proceedings of Ninth Annual Forum), Cameron Fincher (Ed.). The Association for Institutional Research, 1969, pp. 13-20.

[9]The purposes of the Association for Institutional Research,". . . to benefit, assist, and advance research leading to improved understanding, planning, and operation of institutions of higher education" suggest that the general researchers qualify for membership.

Furthermore, there should be similarities in the approaches of institutional researchers and of individuals engaged in theoretical research. Specifically, the institutional researcher should be as objective, detached, thorough, and systematic as any other researcher. His problems should be as well defined, his methods as appropriate, his analyses as logical, and his conclusions as uninfluenced by pre-conceptions, as those of any scholar. In the process of his work he should develop or redefine a clear philosophy of higher education to serve as a catalyst for his efforts. The president in quest of institutional research assistance is seeking objectivity and truth. While he may retain the right to withhold information when it is subject to misinterpretation or is likely to result in harm to the institution, still he needs to have it.

What Can Institutional Research Do For the Institution?

Institutional research is a function of institutional governance. It is carried on in institutions whether or not individuals or organizational units are specifically assigned to institutional research. Even where such individuals or units exist, portions of the function are carried on elsewhere. The college or university that is considering the creation of a position or an office for institutional research should consider it in the framework of the total function. It is even possible that through new statements of responsibilities the portions of the function viewed as essential can be carried out in existing organizational units or that more than one new unit is needed.

The following eight-point outline of the function of institutional research includes remarks on how an organized institutional research office can operate. Hopefully, this listing will be of help as a college or university considers how to formalize the function in order to have more, better, and better coordinated institutional research.

1. Preparation of Operating Reports. Operating reports include enrollment, student aid, housing, financial, personnel count, and other types of data, presented in tabular form. Typically such reports are prepared with a minimum of analysis by that office which has the responsibility for the particular phase of institutional operation. These types of reports are not trivial; they are fundamental. A central problem with them is often the matter of definition. Who is a student to the registrar may not be the same as who is a student for the budget-maker, and who is a faculty member to the payroll officer may not be the same as who is a faculty member for the Faculty Senate or for the teaching-load study.

In most colleges and universities there is a need for coordination of the basic operating report information. If such reports are to be consistent and most meaningful, definitions and data categories need to be established, agreed upon, and used. An institutional researcher might be asked to undertake this type of coordination. Though he may not prepare any of these reports, he will need to have complete files of them and to understand them, for he will frequently refer to them and may be asked for analyses and interpretations which will require the use of them. The institutional researcher, if there is one, will be the individual most centrally concerned with the adequacy and significance of information on the institution as a whole. He should have a major role in designing the information system.

2. Preparation of Analytic and Summary Reports. Periodic analyses of quantifiable aspects of the institution's operation including prose interpretations, but mainly tabular presentations, may be called analytic reports. Class size and teaching load tabulations, unit cost analyses, and space inventory data and utilization studies are illustrative. Another useful form of summary data is the "fact book." The fact book will contain summaries from the operating reports and from the analytic reports, just mentioned, covering a period of years in a form that permits ready reference and easy annual updating.

Because faculty, space, and operating dollars are the most critical resources of a college or university, special and sensitive attention needs to be given the preparation of the analytic reports describing their utilization. Reports of class size and faculty effort, for example, must be meaningful to both faculty and administration, and it is difficult to present information which is clearly understood. Interpretations of the data in such reports must be made with care. Though it may not be appropriate to compare individual departments for a given year in terms of statistical information on class sizes, teaching loads, and unit costs, it is meaningful to examine these types of indices for a single department over a period of years.

Typically, reports of this type contain information in considerable detail. At first glance much of the detail is of little immediate value. Experience demonstrates, however, that the detail is useful for reference purposes, at least. When it becomes desirable to take an intensive look at a specific academic area, the files of historical detail are indispensable. Further, while no college or university president can afford the time needed to focus upon the inevitable detail, an institutional research officer can be expected to examine the data to identify highlights, trends, and existing or potential problem areas for consideration by others. Brief summary analyses of reports for busy executives are important products of institutional research. Because the information required to do these types of analyses come from several sources and because they are interrelated, it may be advantageous to centralize these efforts in an office for institutional research.

Not infrequently, a need for institutional research is sensed within a college or university on the basis of a vaguely perceived absence of basic information on the institution. A sound initial response to this need is to commission the preparation of the fact book mentioned above. The assembling of basic data on a consistent trend basis by department or college on such factors as numbers of faculty and other staff, student enrollment, student credit hours, budgets, expenditures, degrees granted, class size, teaching loads, and others can be a very helpful undertaking, and might demonstrate that the institution is not as information poor as had been suspected. As an initial charge to an institutional researcher, it has the added benefit of introducing him to the institution and to the existing repositories of information therein.

3. Conducting Analytical or Modeling Studies. Many members of the audience for which this memo is written have been introduced to the ideas of simulation and mathematical modeling as proposed for use in management and planning. By viewing the college or university as a system composed of quantifiable, interfacing components, it has been possible to develop mathematically sophisticated models of the operation of an institution. A number

of colleges and universities may be seeking this type of activity, perhaps in the context of a program planning and budgeting system. One critical fact that needs to be recognized is that this type of analytical activity requires extensive and consistent historical base-line data. It often takes a concerted effort to assemble the data base.

It is not necessary to restrict this category of activity to the sophisticated and comprehensive analyses which one may initially be led to believe are essential. An enrollment projection is an analytical type study based upon a model which specifies categories of students, uses attendance and persistence rates, and other variables. Such a model may be extended to the projection of course enrollments to one or more future years, used as an aid in course scheduling, and utilized in short- or long-range estimates of faculty needs. Planning for physical facilities may draw upon related models or analytical studies.

4. Design of Management Information Systems. The dependencies among the three preceding types of activities discussed above come to a focus in the development of management information systems. College and university decision-makers are increasingly looking to data and information for guidance, and the advent of computers has directed attention to institutional data in a comprehensive way. What data should be collected? What are the appropriate categories and definitions? How should it be collected, stored, and retrieved? How can the different types of data be interrelated for specific purposes? The design and development of systems for collecting, processing, storing, retrieving and using management information are interests of institutional research for two basic reasons.

First, the effort required to specify potential uses of information and the types of information and reports needed is a type of research and requires the competencies institutional researchers should have. While the existence of the computer has focused attention upon the need for careful thought in the development of the management information system, the idea of timely and consistent management information is not limited to the situation in which a computer is available. Any college or university should continually give attention to the manner in which the data base for management is developed and used, even if the data are maintained by manual records.

Second, the design and operation of the management information system should be closely related to the institutional research function, because in its other activities institutional research is a principal user of the resultant data. The basic data to make a salary study should be available in budget or payroll records. For a study of class sizes, the data should be available in registration records. The problem is that the data required to produce the payroll and the data collected in the process of registering students cannot be counted upon to be in the form required for the institutional research analyses. It is precisely for this reason that the individuals assigned institutional research responsibilities must understand the nature of the data collected elsewhere in the institution and be in a position to influence the nature of such data. Such influence can best be felt in the design of the management information system.

5. Special Studies. When changes of policy are in the offering or

issues of significance emerge and require deliberation, a special study is needed. The greatest variety of types of institutional research activities are included in this category. Several groupings of one-time or infrequent data collection and analysis efforts illustrate this central function of institutional research. There are studies of students: — student ability, student or campus climates or cultures, student finance, student retention, student advising, student achievement, alumni reactions, and others. There are studies of faculty: — faculty recruitment and retention, tenure policies, fringe benefits, consulting activities, faculty research activities, and others. Similar types of studies are undertaken for non-faculty employees. There are special studies of the curriculum: — course proliferation and duplication, degree requirements, student programs, grading practices, and others. Studies of committee structures and of institutional decision-making processes are in a category of studies of administration. Studies and evaluations of other programs, such as honors programs, residence hall programs, student activities programs, and others, form yet another category for special studies. Studies of sit-ins, strikes, and demonstrations have commanded attention in recent years.

This listing of special studies is both incomplete and imposing. In fact, the problems facing higher education and individual colleges and universities are appreciable in number and importance. Clearly, if an office of institutional research is established, responsibility for the conduct of many of these types of studies will be placed there. Some or many may also be carried out elsewhere. The institutional researcher may encourage and cooperate with other college and university offices, individual faculty members, faculty committees, and advanced students, in designing and carrying out studies of these types. Individual faculty members and graduate students are often overlooked as a resource for the conduct of institutional studies.

6. Studies in Support of Educational Development. Because of their importance, special note should be taken of studies of educational development. These studies are designed to change and improve the academic programs of the college or university. These include studies of curriculum, of student learning, and of experimental instructional programs.

Many colleges and universities are seeking ways to focus attention specifically and intensively on educational development. It is important to recognize that curriculum and instruction have become cherished prerogatives of the faculty; and that faculty initiative or, at least, considerable faculty involvement is essential in efforts to change them. Research for educational development may need to be "action" research at its best. One technique that has been successfully employed is the use of discretionary fund grants to departments and faculty members for research and developmental efforts on curriculum and instruction.

An institutional researcher can, through studies, identify problems in the educational program and can arouse faculty interest in such problems. In addition, he and others can provide consulting and other supporting services to faculty efforts at educational development. Services needed include assistance in research design, in the use of media, in the psychology of learning, and in techniques of evaluation. Since the overall vitality of a college and university lies in the instructional-educational area, it is important for all concerned to find ways to keep critical attention focused on this area.

7. Related Staff Work. As a member of the institution's staff, the institutional researcher is increasingly being called upon for staff work that is based more upon his expertise than his charge to produce information and to undertake studies. Because it can be hoped that he is knowledgeable of higher education in general and of his institution in particular, such assignments are not unreasonable. The only problem is in developing priorities for his several potential responsibilities, and, in view of the needs, this could be a major problem. Administrative assignments which are repetitive in nature -- for example, allocating space among competing claimants -- may be extremely helpful to an institution, but may reduce the time and energy of the staff in institutional research to such an extent that special studies and other assignments are no longer possible or are performed with undesirable haste.

The institutional researcher may be asked to consult with faculty and administrative councils or committees which are considering problems of and policies for the institution. He may serve as staff to such groups and, in addition to providing information for their consideration, may be asked to prepare position papers for discussion. Discussions of such topics as how to recognize excellence in teaching, how to evaluate proposals for new programs, or how to begin movement toward a system of program planning and budgeting can often be facilitated by means of prepared statements designed to stimulate reactions and refinements.

Similarly, the office of institutional research can maintain a reference library of newsletters, pamphlets, and reports on higher education from federal agencies and others as a resource for the college or university. The office may even provide an abstracting service for busy administrators who do not have the time to even peruse the many and varied publications on higher education which arrive at their offices.

He should be able to represent the college or university at extra-institutional meetings and on inter-institutional committees where the concern is chiefly with institutional information. While many institutional researchers feel they should stay removed from political processes, many are called upon to participate in board of trustees' meetings, legislature hearings, and coordinating board activities for the purpose of presenting and interpreting information and are comfortable in doing so.

8. Responding to Questionnaires. Many colleges and universities may be considering the organization of institutional research largely because of the problems of responding to the many requests for information from outside the institution. If the college or university is to be represented in an accurate and consistent fashion, it is almost imperative that questionnaires be centrally coordinated. As an information expert for the institution, it is reasonable that the institutional researcher with appropriate assistance be assigned responsibility for coordinating the completion of questionnaires from governmental agencies and others. Usually, he is empowered to identify those which do not merit response.

The institutional research office also may be asked to provide or to assist in providing the often extensive information required to support research proposals and related requests for outside funding and to serve as a focal point for the assembling of the institutional information required for regional accrediting association self-studies.

Very clearly, no single individual or small staff can be expected to engage in all of the activities suggested by the preceding eight categories. Assignments for a new office of institutional research can be selected on the basis of most pressing needs and in relation to related activities underway or assigned elsewhere and with knowledge of what is being left undone for the moment. As postponed needs become more urgent, priorities can shift or the new organization can expand. Even from the beginning, however, the institutional research staff should not be so burdened with specific assignments that its own initiative in identifying and engaging in needed inquiry is prohibited. The staff should be encouraged, within budgetary limits, to suggest and initiate projects. Its vantage point and attitude should enable it to sense the need for an inquiry before this need becomes apparent to others.

Should Institutional Research be Administratively or Educationally Oriented?

In many colleges and universities institutional research is limited to the development of administrative or management information and the pursuance of related special studies. Elsewhere, the institutional research effort is aimed at more purely educational concerns in the areas of student development, curriculum, and instruction. Both of these focuses of effort are essential. Though they can be separated, they should not be independent. There is substantial merit in the marriage of them.

The aim of an educational study may be to maximize the effectiveness of a course or a program, but the means of doing so realistically cannot be considered independently of cost and related management concerns. The search for quality or effectiveness can and often must be a search for efficiency the two are not incompatible. Similarly, because education is the reason the institution exists, management decisions, for example, those involved in budget allocations, must be based in large measure on their potential effects on the educational program. The management studies of institutional research should be carried out from this perspective.

The position suggested here is that the two categories of institutional research are ultimately and, in some respects, immediately related and should not be conducted in isolation. The organization for institutional research adopted by a college or university should be developed with recognition of this interface between administrative and educational research.

How Should Institutional Research Relate to Long-Range Planning?

Many colleges and universities first identify the need for better institutional information during the development of an organization for long-range planning. If it is not recognized a priori, then it is recognized by the planning group that there are serious limitations to the data base available for planning.

Long-range planning and institutional research are not identical functions. Planning focuses upon goals and purposes and the methods for achieving them, and it typically requires committee work with philosophical and policy, along with quantitative considerations. Institutional research collects, analyzes, interprets, and reports information. Based upon this distinction, institutional research often is viewed as a resource for

planning. Among its several activities it provides the quantitative data base and interpretations required in the planning process. Hopefully, an established institutional research activity will have available appreciable portions of the information required at the time a planning effort is initiated.

On the other hand, to the degree that long-range planning becomes quantitatively based and becomes tied with an operational program planning and budgeting system, there may be merit in considering a combination or close integration of the two functions. Most or all institutional research should be forward-looking, and this includes the educational development as well as the analytical modeling efforts described above. Perhaps long-range planning should become the focal point for institutional research efforts. It may not be too extreme to suggest that the influential institutional research organizations of the future will be those that are concerned with planning and constantly test the probable effects of pending decisions.

How Should Institutional Research Be Organized?

This memo, while referring frequently to the "institutional researcher," has focused on institutional research as a function with a minimum of specific implications for organization. There are many organizational options available. These range from utilizing existing personnel in existing units to the creation of an office of institutional research with a director and staff. In larger institutions the creation of two or more separate organizational units with distinctive institutional research responsibilities may be required. Clearly, no prescription for success can be suggested here. Too much depends upon the size, style, and needs of the individual college or university.

How much will it cost? The answer to this question depends upon the organization and the activities to be undertaken. The experienced college or university administrator realizes that, within limits, he can have what he wants if he is able to pay for it. Budgets for offices of institutional research range from a part-time director's salary to $200,000 or more. If it is decided to open an office for institutional research as a new venture, the first financial consideration will go to the salary of the director of that office and this will depend upon the level or responsibilities to be assigned to him and the qualifications these responsibilities require. A very modest thrust may be possible for $10,000; salaries for the position now range to over $30,000.[10]

In organizing for institutional research, special consideration needs to be given to the activities to be undertaken. It should be evident that not all of the activities outlined on the preceding pages can be undertaken intensively without a considerable expenditure. The danger is that one type of activity may require such a proportion of effort as to preclude other equally needed types. Similarly, the organization should include some mechanism for a continuing review of the priorities assigned different types of activities. In some cases reliance can be placed on the director's judgement

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[10] Salaries in Higher Education, 1969-70. Washington, D.C.: Research Division-National Education Association. Research Report 1970-R6, 1970. p. 61.

or on that of his immediate superior. If the conduct of educational studies is a specific function, an advisory committee which includes faculty, can be helpful in setting priorities.

What are Requirements for Effective Institutional Research?

Some of these final points on effectiveness relate to the climate in which institutional research activity finds itself, and others have to do with qualifications for the director, assuming such a position is under consideration and whatever is the title for it. These considerations may be idealistic in part, but, if they are unrealistic for the institution, the implications of not achieving them need to be recognized.

1. The adminstrative officers and faculty of the institution must understand the function of institutional research and value the use of data in decision-making. The institutional climate must be receptive to research on the institution. Such a climate does not always exist. Decision-making by tradition and intuition is so much a characteristic of some institutions and of the manner of those responsible for them, that institutional research comes close to being a futile exercise. Occasionally, sound institutional research and efforts at educating its users can modify environments of this type.

2. The institutional research officer needs to be an accepted member of the administrative team and a person who is trusted and respected by the faculty. Not only is faculty cooperation needed in many phases of institutional research, but faculty, as well as adminstrative, acceptance of its results and its implications is often even more critical. This is one reason faculty status for the institutional researcher may be desirable. An occasional teaching assignment can assist him in maintaining the faculty perspective and has other values as well.

3. The institutional research officer must establish and maintain cooperative working relationships with the personnel of each of the several college or university operating offices -- admissions, registration, finance, business affairs, student affairs, data processing, and the others. Because of his pervasive responsibilities he will need their trust, respect and support. The creation of a new organizational unit quite naturally engenders concerns of territorial imperatives. Since there is a profusion of tasks to be completed, the new organization usually is created to fill a void rather than to replace existing functions, but existing staff may need to be assured that this is the case.

4. The institutional research officer needs to have access to knowledge of current problems and issues facing the institution. Without such knowledge his ability to provide timely information on central issues will be diminished and to this extent his potential effectiveness will be curtailed. Some method, preferably short of membership on all college or university committees, needs to be developed to facilitate this access.

5. The institutional researcher should possess the ability to anticipate problems or issues before they occur. A completed study in the hand is worth two contemplated studies when a problem requiring immediate attention arises. It is not uncommon for a decision to be required before

extensive research effort can be completed. A wise institutional researcher can sense a problem and begin collecting information relevant to it while it smolders and before it bursts into flame.

6. A related requirement is that the institutional researcher keep abreast of developments and research in higher education generally by attention to the relevant literature. Such a requirement applies to an individual in any professional field. It is certainly no sin to learn from the experience of others and to borrow ideas and techniques that have proved successful elsewhere. By the same token, the institutional researcher should be encouraged to share those portions of his experiences that are potentially useful to others.

7. The requirement of objectivity and detachment characteristic of all scientific endeavor has already been mentioned, but it bears re-emphasis. These qualities are the essence of any research responsibility and are the basis of the widely held view that the institutional researcher should remain in a staff role, separate from policy determination and decision-making which often involve considerations extending beyond those provded by the results and implications of research.

8. The institutional researcher needs to possess skills in quantitative methods and research methodology in addition to a knowledge of higher education and administration. Even the preparation of an apparently simple questionnaire requires certain skills. Competency with statistics is essential, but a research statistician may not be needed. Common sense, supplemented by an analytical mind, plus basic quantitative skills are adequate for a broad range of institutional research. Some competency and experience with information processing machinery is required for most institutional research positions. At a minimum, the institutional researcher needs to understand the capabilities of the computer and be able to communicate effectively with those who program and operate it. These quantitative skills need to be supplemented by a thorough knowledge of higher education which will provide an historical and philosophical basis for operation.

9. Abilities in effective oral and written communication are major requirements for effective institutional research. Information may be superbly collected and analyzed; but if the information and its implications cannot be communicated with clarity and point, it may have little or no impact.

10. To be even more specific, skills in tabular and graphic presentation are important, and not everyone possesses such skills. In considering candidates it may be helpful to review samples of their prior work. Even after one is selected, feedback on the aspects of his products which have and have not communicated effectively should be helpful to all.

After institutional research is organized at a college or university and in whatever form this organization takes, it should be subject to careful and periodic evaluation. It should be organized for clearly understood reasons and purposes, and its performance can be judged on the basis of them. If one organization does not work, another can be tried.

With the right climate, organization, personnel, resources, and luck, institutional research can contribute to the health, vitality, and forward movement of any college or university.

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